

Curriculum Vitae  
Dick Penniman  
12/1/20

**Personal:** Born in Los Gatos, California, December 10, 1950

**Education:**

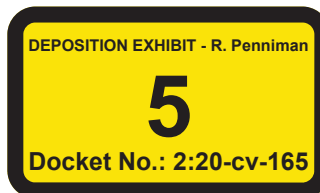
- Los Gatos H. S., CA; Student Body V.P; Student Council President; Key Club CA/NV/HA Dist. Lt. Governor
- B. S. Economics; Santa Clara University, California (1973)
- Continuing Education:
  - EMT/Meteorology/Geology/Spanish; Sierra College, Truckee, CA (1974 -present)
  - Instructional Processes in Vocational Education; UC Berkeley, CA (1987)
  - Calculus I & II; Sierra Nevada College, NV (1987-1988)
  - Differential Equations (Audit); University of Nevada, Reno (1988-1989)

**Seminars and Training:**

- Professional Ski Instructors of America-West, C.E. Clinics (1998-present)
- North American Ski Training Center, Ski Instructor Training, Sugar Bowl, CA (1997)
- Professional Ski Instructors of America-West, Certification Prep Clinic for Level I, Soda Springs Ski Area, CA (1997), Misc. Technical Clinics (1998-present)
- CLE International, Recreation & Adventure Program Law & Liability, Denver, CO (2005)
- Seminar "Role of Standards in Sports Litigation" (ASTM), Denver, CO (1995)
- 8th International Congress for Transportation by Wire Rope; International Organization for Transportation by Rope (OITAF), San Francisco, CA (1999)
- Symposia on Ski Trauma and Safety, International Society for Skiing Safety (ISSS) & American Society for Testing & Materials (ASTM): 9<sup>th</sup> (1991/Australia); 10<sup>th</sup> (1993 Austria); 12<sup>th</sup> (1997 Canada); 13<sup>th</sup> (1999 Italy); 14<sup>th</sup> (2001/New Zealand); 19<sup>th</sup> (2011 U.S.); (2018/U.S.)
- France Neige Int'l Ski Area Management Seminar [Invitee France/Switzerland/Italy (1990)
- Far West Professional Ski Patrol Association (FWPSPA) Clinics;
  - Mammoth Mountain & Alpine Meadows, CA (1973-1976, 1978-1979); certification testing, Mt. Shasta, Heavenly Valley, Sierra Summit, CA (1976); director of certification clinics. Sierra Summit, CA (1986); skier psychology and behavior. Sierra Ski Ranch, CA (1988); physical conditioning for skiers. Sugar Bowl, CA (1989); high altitude illness.
- Riblet Ski Lift Maintenance School. Vail, CO (1978)
- International Symposium on Avalanche Formation, Movement and Effects. Davos, Switzerland (1986)
  - Presented closing paper for the Symposium
- International Snow Science Workshops (ISSW): Aspen, CO (1984); Squaw Valley, CA (1986) Presented Paper; Whistler, B.C. (1988); Big Fork, MT (1990); Breckenridge, CO (1992) Presented Paper; Snowbird, UT (1994); Banff, AB. (1996) Presented Paper; Big Sky, MT (2000); Penticton, B.C. (2002); Jackson Hole, WY (2004); Telluride, CO (2006), Squaw Valley, CA (2010); Banff, Alberta (2014).
- American Association of Avalanche Professionals (AAP)/American Avalanche Association Fall Program (Copper Mountain, CO 1995); Avalanche Control and Risk Management (Alta, UT 1997); Avalanche Education Conference (Alta, UT 1999); Avalanche Weather Seminar (Snowbird, UT 2003); Avalanche Education Seminar (Snowbird, UT 2004)
- Western Snow Conference 63rd Annual Meeting, Reno, NV (1995)
- Outward Bound Outdoor Instructor Training Course. Sisters, OR (1983)
- U.S. Forest Service National Avalanche School. Reno, NV (1975)
- U.S. Forest Service Avalanche Gunner's School. Alpine Meadows, CA (1975)

**Registrations, Certifications, & Licenses:**

- California Community College Lifetime Instructor Credential in Forestry, Natural Resources, and Related Technologies (California #1012PEN002)



- Professional Ski Instructors of America-West; Certified Ski Instructor Level I (Current)
- Far West Professional Ski Patrol Association Certified Patroller (#93 Inactive)
- American Avalanche Association; Certified Avalanche Instructor (Current)
- Chilean National Ski Patrol (#284 Inactive)
- National Ski Patrol System Certified Patroller (#0072 Inactive)
- Emergency Medical Technician I/CPR (California #0002845) (Current)
- California Contractor (Limited Specialty #462362, C61 Avalanche Blasting) (Inactive)
- Licensed Blaster, CA. Avalanche Control; Hand Thrown & Propelled; Cap & Fuse (Cal- OSHA #995)(Inactive)
- U.S.F.S. Military Weapons Certificate (Assistant Avalanche Gunner)(Inactive)
- American Red Cross Water Safety Instructor (Inactive)
- American Red Cross Basic and Advanced First Aid (Inactive)

#### **Appointments/Awards:**

- California Outdoors Hall of Fame Inductee (2014)
- Friends of Minnie Dole Outstanding Ski Patrol (1978-79); NSP unit citation, Alpine Meadows Ski Patrol
- Sierra College and Sierra Nevada College; Adjunct Professor
- Far West Professional Ski Patrol Association/NSP Certification Examiner (1975-1986)
- International Society for Safety in Skiing, ASTM Publications Reviewer (1993/2012)
- Journal of Science and Medicine in Sport; Peer Reviewer (2018)
- Cal-OSHA Avalanche Blasters Licensing and Testing Advisory Board
- Nat'l Research Council Committee on Ground Fault Hazards, Panel on Snow Avalanches
- Placer County Avalanche Advisory Committee (Inactive)

#### **Current Affiliations:**

- American Society of Safety Professionals (ASSP); Professional Member
- International Society for Skiing Safety (ISSS); Member/Peer Reviewer
- SnowSports Safety Foundation; Board of Directors, Chief Safety Officer
- US Terrain Park Council; Member (Technical Committee)
- American Society for Testing and Materials, F-27 Snow Skiing Committee, Member
- Western Snow Conference, Past Member
- American Avalanche Association (A.K.A. American Assoc. of Avalanche Professionals), Professional Member (Life); Founding Co-Vice President (1986); Secretary (1987-90; 1990-94); Education Committee (1988-90); Education Committee Chairperson (1995-97); Ad hoc Committee on Standards Chairperson (1993-94); Certified Avalanche Instructor (current)
- National Ski Patrol System, Lifetime Member F-600-00096
- Professional Ski Instructors of America, Member/Certified Instructor

#### **Present Employment:**

-Snowbridge Associates, Truckee, California (1983-present) Skiing Safety Consultant; Avalanche Specialist; Educator. Ski area consulting work includes trail safety and design, mountain operations management, and employee training. Avalanche consulting work includes avalanche hazard forecasting and mitigation (Avalanche Forecaster for Washoe County, NV), zoning, and safety training. Since 1979, forensic work includes investigation and reconstruction in ski and avalanche accident litigation for both defense and plaintiff. Mr. Penniman has qualified as an expert in skiing safety including lift operations; slope design, configuration, maintenance, and grooming; snowmaking; ski instruction; search and rescue; first aid; impact mitigation; hazard marking; signing and warning; safe vehicle operation (including snowmobiles); and avalanche hazard mitigation for state, provincial, and/or federal courts in Canada, Australia and the U.S including Alberta, British Columbia, CA, CO, ID, ME, MA, MI, MN, MO, MT, NV, NJ, NY, OR, PA, SD, UT, VT, Victoria, VA, WA, WI.

#### **Mountain Resort Industry Experience:**

- White Pine Ski Resort, Pinedale, WY. Professional Ski Patrol Director (2007-2008); Directed ski patrol operations and training. Responsibilities included hazard evaluation, signing, and marking; trail grooming and trail design; directing on area search and rescue operations; and all safety for special events.

-White Wolf Ski Resort (Caldwell Associates, Inc.), Tahoe City, California. Guide III/Instructor (2005-present); Lead Guide. Chief certifying avalanche safety instructor for guides and clients. Avalanche Hazard Study for Resort. Skiing safety consulting.

-Alpine Meadows Ski Corporation, Tahoe City, California. Director of Skier Services (1979-81); Responsibilities included direct supervision of Race Dept., Skier Guides Dept. (special events and skier information services), and Graphics and Sign Dept. (signs and hazard marking production). Special duties included acting as special liaison between the Operations Manager and the Marketing Director. Mountain Coordinator for U.S.S.A. Junior Olympics (1979); Responsibilities included all racecourse slope preparations, and both public and participant safety for slalom, giant slalom, and downhill courses. Assistant Ski Patrol Director (1977-79); See Sugar Bowl Ski Corporation, Ski Patrol Director. Mr. Penniman was also a very active volunteer member of the Alpine Meadows NSP during this time. In 1978 he was awarded full NSP "Certified" status and was appointed an NSP certification examiner.

Professional Ski Patroller (1975-76); Responsibilities included care and evacuation of injured skiers, hazard evaluation and mitigation, and avalanche control. Special duties included writing hazard marking and sign program, lift operation, leading avalanche control routes.

-El Colorado-Farellones Ski Area, Santiago, Chile. Mountain Manager/Assistant Operations Manager (1977-78); Responsibilities included direct supervision of all lift operations and maintenance, slope grooming, ski patrol, and ticket checking. Special duties and projects included design revisions of the ski trail system, implementation of a new lift ticket system, and feasibility studies for the expansion of the ski area that is now part of the largest ski complex in South America. Initiated first avalanche control program.

-Sugar Bowl Ski Corporation, Norden, California. Professional Ski Patrol Director (1974-75); Directed all ski patrol and snow safety operations and training. Responsibilities included hazard evaluation, signing, and marking; trail grooming and design; summer lift maintenance; avalanche hazard evaluation; directing all avalanche forecasting, control, and rescue operations; directing all other search and rescue operations; coordinating daily meetings of mountain operations departments. Professional Ski Patroller (1972-74); Responsibilities included care and evacuation of injured skiers, hazard evaluation, and avalanche control. Special duties included writing hazard marking and sign programs, slope grooming, lift operation, leading avalanche control routes. Received all certified scores and highest over-all score of all candidates tested at the 1973 Spring Testing Clinic of the Far West Professional Ski Patrol Association (FWPSPA). Hazard marking and sign program was included in the FWPSPA Handbook as a model.

#### Teaching and Training Experience:

-Sierra Nevada College, Incline Village, NV; Adjunct Professor, Ski Area Mountain Operations and Safety. (1987-95); Avalanche Awareness for Ski Area Management (1982, 1988-95).

-Sierra College, Truckee, CA; Adjunct Professor, Winter Sports Mountain Management (1999-2001); Avalanche Safety for Ski Area and Backcountry, Level I and/or Level II (1981-82, 1985-2011).

-Recreational Equipment, Inc.; Berkeley, Concord, Corte Madera, Folsom, Fremont, Marina, Roseville, Sacramento, San Carlos, San Francisco, Santa Rosa, and/or Saratoga, CA, (1993 - 2009); Reno (1996-present); Guest Lecturer, Avalanche Safety for Backcountry Recreation.

- CLE International [Faculty], Ski Liability Conference, Vail, Colorado (1996)

-Association of Professional Patrollers (AAPP) (formerly Far West Professional Ski Patrol Association); Guest Lecturer, Ski Accident Litigation (1986); Certification Examiner, Hill Safety (1987), Skiing Proficiency & First Aid (1974), Hill Safety (1975), Hill Safety & Skiing Proficiency (1976), Hill Safety and Avalanche Control (1978); Director, Certification Training Clinics (1976) China Peak, Heavenly Valley, and Mt. Shasta Ski Area. Rewrite and revise the Hill Safety Section of FWPSPA Handbook (1988)

-National Ski Patrol (NSP), Far West Div.; Certification Trainer/Examiner (1978-79)

-National Ski Patrol (NSP), Alaska Div.; Certification Trainer/Examiner (1982 & 1985). Established Alaska's 1<sup>st</sup> NSP patroller certification program (1982)

-National Avalanche School, U. S. Forest Service/NSP/National Avalanche Foundation, Principle Instructor, Artificial Avalanche Release (1985), Phase II Instructor, Ski Area Field Course, Copper Mountain, CO (1986); Backcountry Field Course, Summit County, CO (1986); Workshop Instructor (1983-87)

-Alaska Avalanche School, Alaska State Parks/Alaska Mountain Safety Center, Inc., Anchorage, AK; Principle Instructor (1984-85/1993-94)

- American Avalanche Institute, Jackson, WY; Principle Instructor, Professional Avalanche Course, Colorado Mountain College (1989); Guest Lecturer, Active Hazard Mitigation Techniques, Professional Avalanche Course, Copper Mountain, CO (1986); Guest Instructor, Level III Guides Course, Jackson Hole, WY (2008).
- Marmot Mountain Works, Inc., Berkeley/San Jose/Kentfield, CA (1994-1998); The North Face, Inc., Palo Alto, CA (1999-2000); Any Mountain, Inc., Cupertino/Corte Madera, CA (1999-2000); Patagonia, Inc., Reno, NV (1997); Mountain Adventure Seminars, Bear Valley, CA (1997-1998). Misc. Avalanche Lectures and Courses
- Pacific Crest Outward Bound School, Portland, OR; Chief Instructor (1983-84)

**Mountain Resort Site Planning and Other Safety Consulting:**

- Farellones-El Colorado Ski Area (Andacor), Chile; Consultant, terrain and trail safety and expansion (2005, 2014, 2016), avalanche mitigation and safety training and consulting (1999-present)
- White Wolf Ski Resort (Caldwell Associates, Inc.), Tahoe City, CA; Consultant, Avalanche Zoning Study, Snow Safety Plan, skier safety and trail design (1998-present)
- White Pine Ski Area (Wind River Resorts, Inc.), Pinedale, WY; Consultant, Master Plan Co-Author (skier safety policy), trail design, active grooming, patrolling, & patroller training (1996-2001; 2002- 2010)
- Jackson Hole Mountain Resort, Inc., Jackson Hole, WY; Consultant, skier safety and trail design (1989).
- Los Penitentes Ski Area, S. A., Mendoza, Argentina; Consultant, "Los Penitentes Snow Safety Plan"/ trail design and expansion recommendations (1986)
- Sierra Helicopter Ski, Truckee, CA; Consultant, guide & trainer; avalanche terrain analysis (1986).
- Royal Gorge Cross Country Ski Center, Soda Springs, CA; Consultant, "Avalanche Hazard Study for Proposed Base Lodge Maintenance Building" (1985)
- Soloy Air Service, Inc., Palmer, Alaska; Consultant; Avalanche terrain survey for proposed helicopter ski operation in the Talkeetna Mountains (1984)
- Deer Park Ski Area, Tahoe City, California; Consultant, "Avalanche Analysis and Hill Safety Addendum For the Proposed Beta Chairlift" (1983)

**Avalanche Hazard Planning and Mitigation Consulting:**

- Washoe County, NV; Avalanche Hazard Forecaster (1993 - 2018). Avalanche Hazard Zoning Study (1993).
- Placer and Nevada Counties, CA; Avalanche Hazard Zoning Map Revisions (1984 - present). 200+ properties.
- California Division of Forestry; Timber Harvest Plan Avalanche Study Reviewer (1992)
- Willow Creek Mine (Enserch Exploration, Inc.), Alaska; Snow Safety Director (1985)
- Helms Creek Hydroelectric Project (Granite Construction, Inc.) CA; Snow Safety Director (1984).

PUBLICATIONS AND WRITINGS OF DICK PENNIMAN 1/5/16

- 2015; "Explosives as a Tool; not a Test". The Avalanche Review, Victor, Idaho; (Vol. 33, No. 4)
- 2014; "A Tool, Not a Test: Explosives Use in Avalanche Hazard Mitigation; International Snow Science Workshop Proceedings; Banff, Alberta
- 2012; Invited Chairlift and Child Skiing Safety Articles; The Lake Tahoe News, South Lake Tahoe, CA, (March/April, 2012)
- 2012; The California Mountain Resort Safety Report: Survey Methodology and Scoring Criteria; Skiing Trauma and Safety, Eighteenth Volume; American Society for Testing and Materials, Conshohocken, NJ.
- 2011; "The California Mountain Resort Safety Report"; SnowSports Safety Foundation; Sacramento, California; 184 pp. (Principle co-author).
- 2004; "The SME Avalanche Tragedy; A Summary of the Data"; International Snow Science Workshop Proceedings; Jackson Hole, Wyoming.
- 1999; "Customs and Practices at U.S. Ski Areas for Mitigating Common Hazards through Trail Configuration and Maintenance"; Skiing Trauma and Safety, Twelfth International Symposium, STP 1345; American Society for Testing and Materials, Philadelphia, PA.
- 1996; "Reducing Ski Area Liability Through Trail Configuration and Maintenance"; invited paper presented at Ski Liability Conference, Vail, CO; CLE International, Denver, CO.
- 1996; "Decision-Making on Variable Risk Terrain"; ISSW Proceedings; Banff, Alberta, Canada.
- 1996: "Avalanches!"; Adventure West, Carson City, NV; December.
- 1996; "Standard Methods and Materials for Mitigating Injuries from Impact with Fixed Obstacles at U.S. Ski Areas"; Skiing Trauma and Safety, Tenth International Symposium, STP 1266, Johnson, Mote (eds.); American Society for Testing and Materials, Philadelphia, PA.
- 1993; "The Custom and Practice for Identification and Mitigation of Common Hazards at U.S. Ski Areas An Opportunity for Standards"; Skiing Trauma and Safety, Ninth International Symposium, STP 1182, Johnson, Mote, Zelcer (eds.); American Society for Testing and Materials, Philadelphia, PA; pp. 215-228.



1993: Avalanche Hazard Study, Washoe County

1992; "The Political Dilemma of Avalanche Hazard Zoning: A Comparative Analysis of Four Sierra Nevada Counties"; International Snow Science Workshop Proceedings; Breckenridge, CO.

1990: Snow Avalanche Hazards and Mitigation in the United States. Panel on Snow Avalanches, Committee on Ground Failure Hazards Mitigation Research, Division of Natural Hazard Mitigation, Commission on Engineering and Technical Systems, National Research Council. National Academy Press, Washington, D.C.; 84 pp. (Principal co-author).

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1990: "Space Age Avalanche Control". Ski Area Management, Woodbury, Connecticut; July 1990.

1989: "The Political Dilemma of Avalanche Hazard Zoning". The Avalanche Review, Salt Lake City, Utah; (Vol. 7, No. 4).

1988: Hill Safety. Far West Professional Ski Patrol Association Handbook, 13 p.; (unpublished)

1988: Avalanche Awareness: A Question of Balance (Video). Alliance Communications, Denver, CO; 20 minutes. (Script Contributor)

1988: "Report from the Secretary". The Avalanche Review, Salt Lake City, Utah; (Vol. 7, No. 2).

1987: "Pit Stops". A monthly column featuring analyses of mountain snowpacks from different regions of the U.S. The Avalanche Review, Salt Lake City, Utah; (Vol. 5, No. 3-6, Vol. 6, No. 1).

1987: "A Close Call in Argentina". The Avalanche Review, Salt Lake City, Utah; (Vol. 5, No. 3).

1986: "Pit Stops". The Avalanche Review, Salt Lake City, Utah; (Vol. 4, No. 3-6, Vol. 5, No. 1-2).

1986: "The Alpine Meadows Avalanche Trial: Conflicting Viewpoints of the Expert Witnesses"; Avalanche Formation, Movement, and Effects. Proceedings of the Anniversary Symposium in Davos, Switzerland, September 1986, International Association of Hydrological Sciences Publication. No. 162.

1985: "Pit Stops". The Avalanche Review, Salt Lake City, UT; (Vol. 3, No. 3-5, Vol. 4, No. 1-2).

1985: "Artificial Avalanche Release". National Avalanche School Manual insert, (7.2.1-.4).

1984: "Pit Stops". The Avalanche Review, Salt Lake City, Utah; (Vol. 3, No. 2-5, Vol. 4, No.s 1-6).

1983: "Helms Creek Controversy". The Avalanche Review, Seattle, WA; (Vol. 1, No. 7).

1983: "Where Grain Meets Granite". The Avalanche Review, Seattle, WA; (Vol. 2, No. 1). 1983:  
"It Was A Class 4 You Say....So What?" The Avalanche Review, Seattle, WA; (Vol. 2, No. 2).

1974: Ski Patrol Policies for Trail Marking. Far West Professional Ski Patrol Handbook, (pp. 26-27).

1972: Cost-Benefit Analysis With Special Reference to Mass Transit, Sloan Foundation  
Technical Report 3, 23 p. (second author).